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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,513	05/23/2001	Edward Waltz	ERIM-45702/03	9882
25006	7590	04/08/2005	EXAMINER	
GIFFORD, KRASS, GROH, SPRINKLE & CITKOWSKI, P.C PO BOX 7021 TROY, MI 48007-7021			CHANG, SUNRAY	
			ART UNIT	PAPER NUMBER
			2121	

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/863,513

Applicant(s)

WALTZ ET AL.

Examiner

Sunray Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This office action is in responsive to the paper filed on February 5<sup>th</sup>, 2005.
2. Claims 1 – 12, and 15 – 23 are presented for examination.  
Claims 1 – 12, and 15 – 23 are rejected.

### **Claim Objections**

3. Claim 7 is objected to because of the following informalities: “the searching of the **test** regions” should be “text region”. Appropriate correction is required.

### **Claim Interpretation**

4. The term, “imagery” has been interpreted as “information of imagery”, based on the definition in specification [Page 5, Lines 11 – 16] “The TISC automatically detects and correlates events (e.g., forest fires, traffic jams, building fires, floods) or objects (e.g., forests, vehicles, buildings, rivers) that are observable in imagery and described in text reports”, This definition provides the basis for how the claims will be interpreted in the body of the rejection..

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1 – 10, and 12 – 23 are rejected under 35 U.S.C. 102(b)** as being anticipated by Margaret E. Elliott (U.S. PG Pub. 2002/0156779, and referred to as Elliott hereinafter).

6. **Regarding independent claim 1,**

Elliott teaches,

- a method of correlating text and imagery [Abstract, 0002 – 0004, 0023, and 0044], steps of
- specifying a target concept [0026];
- providing textual material and imagery [0025 – 0026];
- training a text search detector to examine the textual material for text regions which relate to the target concept, and creating a text target detection record in a database A in the event of a match or other meaningful association; [0027 – 0029]
- training a discriminating feature detector to search for locations within the imagery which relate to the target concept, and creating a location target detection record in a database B in the event of a match or other meaningful association; [0027 – 0029, the imagery is considered to be the “coordinate information” in Elliott ] and
- comparing the records in both databases to declare an approximate correlation, if any, indicative of a common target concept. [0029, and 0044]

7. **Regarding dependent claims 2 and 20,**

- the target concept is an event or object. [0031]

8. **Regarding dependent claim 3,**

- the discriminating features within the imagery include infrared, multispectral or spatial features. [0016 – 0022]

9. **Regarding dependent claim 4,**

- defining a search phrase; [0026]
- testing the phrase against a validation set, [0029] and
- repeating (a) and (b) until all relevant targets in the validation set are detected. [0029]

10. **Regarding dependent claim 5,**

- searching the text regions for geographic location text associated with the target concept. [0026 – 0027]

11. **Regarding dependent claim 6,**

- generating a concept identifier code in both the text and image target detection records using a lookup table in the event of a match or other meaningful association. [0029, and 0053]

12. **Regarding dependent claim 7,**

- Elliott teaches accomplished by reference to a Gazetteer of place names [gazetteer, 0031] and
- their corresponding lat-long locations [longitude/latitude coordinates, 0022].

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**13. Regarding dependent claim 8,**

- a text document ID number [Identifier information, 0021],
- an index to locate a paragraph or passage within the document [attribute information, 0021],
- the target concept identifier code (CIC) [identifier code, 0021], and
- the latitude-longitude (LL) value [longitude/latitude coordinates, 0022].

**14. Regarding dependent claim 9,**

- extracting a lat-long location [longitude/latitude coordinates, 0022].

**15. Regarding dependent claim 10,**

- an image ID number [Identifier information, 0021],
- an index to locate the target within the image [attribute information, 0021],
- the target concept identifier code (CIC) [identifier code, 0021], and
- the latitude-longitude (LL) value [longitude/latitude coordinates, 0022].

**16. Regarding dependent claim 12,**

- reference to a Gazetteer of place names [gazetteer, 0031] and their corresponding lat-long locations [longitude/latitude coordinates, 0022]; and
- a text document ID number [Identifier information, 0021],
- an index to locate a paragraph or passage within the document [attribute information, 0021],
- the target concept identifier code (CIC) [identifier code, 0021], and
- the latitude-longitude (LL) value [longitude/latitude coordinates, 0022].

**17. Regarding dependent claims 15 and 21,**

- the event may be characterized as an emergency, tragedy, disaster or crisis. [0031 – 0032, 0054 – 0058, 0062, and 0084]

**18. Regarding dependent claims 16 and 22,**

- the object involves an environmental asset, structure, or mode of transportation. [0031 – 0032, 0054 – 0058, 0062, and 0084]

**19. Regarding dependent claims 17 and 23**

- examining the textual material or searching for locations within the imagery are earned out in a batch mode or as part of a recursive flow. [0059 – 0061]

**20. Regarding independent claim 18,**

- a text and imagery spatial correlator, [0024 – 0029, and 0044]
- a document text parsing and interpretation engine which uses a context-based search to generate topical information; [0026 – 0028]
- an imagery engine operative to associate the components of an image subsystem operative to associate the topical information with the location information and present a result to a user. [0029]

**21. Regarding dependent claim 19,**

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- a user-trainable agent to define the context of interest in a current search. 0026, and 0027]

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

22. **Claim 11 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Elliott, and in view of Bruce W. Stalcup (U.S. Patent No. 6,741,743 and referred to as Stalcup hereinafter).

(Elliott as set forth above generally discloses the basic inventions.)

23. **Regarding dependent claim 11,**

Elliott teaches target concept within the imagery is in the form of an index [0025 – 0027].

Elliott does not teach a pixel.



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Stalcup teaches a pixel [Col. 7, Lines 37 – 65], for the purpose of efficient storage of the data and efficient indexing and retrieval of multimedia data objects.

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Elliott to include "pixel", for the purpose of efficient storage of the data and efficient indexing and retrieval of multimedia data objects.

**Response to Amendment**

**Claim Objections**

24. Applicants' amendment overcomes the claim objections by modifying claim 4 to depend on independent claim 1; Examiner has withdrawn the claim objection. Yet, new claim objection for claim 7 has been cited.

**Claim Rejections - 35 USC § 112**

25. The amendment overcomes the rejection of 112 Second Paragraph for claims 1 – 17. Examiner has withdrawn the rejections.

26. Applicants traverse the rejection of 35 USC § 112 Second Paragraph. The rejection has been modified and has been retained in this office action.

**Claim Rejections - 35 USC § 102**

27. Examiner has withdrawn the former 35 USC § 102 (b) rejection. Yet, new 35 USC § 102(e) rejections are cited in current office action because of applicant's arguments.

**Conclusion**


28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunray Chang whose telephone number is (571) 272-3682. The examiner can normally be reached on M-F 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-746-3506.

Sunray Chang  
Patent Examiner  
Group Art Unit 2121  
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U.S. Patent and Trademark Office

April 1, 2005

  
Anthony Knight  
Supervisory Patent Examiner  
Group 3600